

REMARKS

Applicant affirms the election of Invention I, which is the subject of Claims 1 – 14. Claims 15 – 19 are hereby canceled. Applicant respectfully disagrees with the rejection of the claims over the cited references.

The present invention comprises a compressor having a pulley, a hub located axially opposite the compressor, and an electromagnetic coil for drawing the hub axially inward toward the compressor to engage the compressor for operation. A cap is mounted to the pulley for containing any sparks generated by contact between the hub and the pulley. In one embodiment, both the cap and pulley have smooth, precisely machined cylindrical surfaces that join the pulley and cap by interference fit.

In contrast, the primary reference, *Bianchi*, discloses a typical compressor 18 (Figure 2) having a only pulley 17. *Bianchi* does not disclose a hub axially outside of the pulley, a cap, nor does it have precisely machined cylindrical surfaces for forming an interference fit between a hub and a cap. Moreover, *Bianchi* certainly does not disclose axial movement of an axially external hub to engage the pulley and actuate the compressor. The Examiner suggests that the secondary reference, *Deppert*, may be used for this purpose. However, careful inspection of *Deppert* reveals that its cover 17 is designed for a stationary system. There is no axial movement of the cap with any form a movable hub (cover 17 is secured to the axially immovable pulley 9), nor does the cover 17 provide a radial clearance for a hub. Thus, the combination of *Bianchi* and *Deppert* still lack many of the elements of the present invention.

The Examiner has further rejected two of the claims by adding a third reference, *Koitaabashi*, for the proposition that the fit between its dust shield 50 (Figure 7) and pulley 24. However, Figure 7 clearly shows that a mechanical interlock (i.e., a lip mounted inside a groove) is used to retain the dust shield 50 on the pulley 24. In no way can the fit between these components be characterized as an exclusive interference fit between two precisely machined cylindrical surfaces.

Accordingly, each of the claims contains one or more of these distinguishing elements. For example, Claim 1 requires, "a hub mounted to the shaft on an outer axial end of the pulley." None of the references disclose such a hub in such a location. Claim 1 further requires "an electromagnetic coil for drawing the hub toward the compressor." Thus, the hub is axially movable with respect to the pulley. Again, none of cited references disclose a hub, much less one that is axially movable with respect to a pulley. In addition, Claim 1 adds "a cap mounted to the pulley for containing any sparks generated by contact between the hub and the pulley." There could not be any sparks if there were no relative motion between the hub and pulley. Since these elements are not found in the prior art, Claim 1 is in condition for allowance.

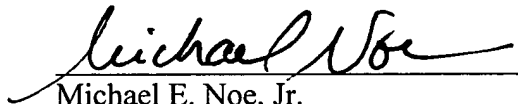
Claims 2 – 7 depend from Claim 1 and are allowable for the same reasons as Claim 1 in addition to their own further distinguishing elements. For example, Claim 2 was rewritten to require the cap to be mounted to the pulley "exclusively by interference fit." Although both *Deppert* and *Koitabashi* show covers, both are mounted to their respective pulleys by conventional mechanical interlocking devices (i.e., rims mounted in grooves). Claim 3 requires the cap to have an internal surface with a precisely machined internal diameter that closely receives an outer circumferential edge on the pulley." Again, these surfaces are not found in the prior art since the references all use other mechanisms to retain their covers on the pulleys. Claim 6 emphasizes the relationship between the hub and the pulley by stating that "the hub has an outer circumferential edge with a diameter that is smaller than a diameter of an outer circumferential edge on the pulley." Clearly, none of the references show a hub, much less a hub having an outer edge that is radially smaller than the pulley. Claim 7 goes a step further by stating the "outer circumferential edge on the hub does not make contact with an internal surface of the cap." Each of the claims is in condition for allowance.

Independent Claim 8 is directed toward a boat having almost all of the unique elements described above. Claim 8 was rewritten to include the hub with its axially mobility and contact with the pulley, as well as the cap having a cylindrical internal surface with a precisely machined internal diameter that closely receives a cylindrical outer circumferential edge on the pulley such that the cap is mounted to the pulley exclusively by interference fit. Again, all of the prior art references use mechanical interlocking devices rather than smooth, cylindrical, interference fit.

Although Claims 10 – 14 use language similar to the preceding dependent claims, they are successively dependent from one another to render an even narrower embodiment than that described above. In addition, Applicant has added new Claim 20 which incorporates the language of all of Claims 1 – 7.

It is respectfully submitted that the claims are in condition for allowance and favorable action is requested. **A check in the amount of \$225.00 is enclosed for a two-month extension of time for a small entity.** If any other fees are required, please charge them to **B&P Deposit Account Number 50-0259.**

Respectfully submitted,

A handwritten signature in black ink, reading "Michael E. Noe, Jr.", written over a horizontal line.

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